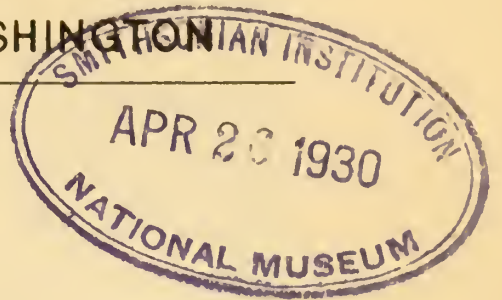


PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

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THE HERPETOLOGICAL COLLECTIONS MADE IN  
HAITI AND ITS ADJOINING ISLANDS  
BY WALTER J. EYERDAM.

BY DORIS M. COCHRAN.

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From June to October, 1927, Dr. Thomas Barbour of the Museum of Comparative Zoology employed the services of Mr. Walter J. Eyerdam, who made collections at several regions on the mainland of Haiti and who extended his efforts by visiting Grand Cayemite Island and by traversing the little-known Gonave Island, both lying a few miles off the Haitian Coast. That his efforts were distinctly worth while may be seen in the three species new to science which he secured. It is to be hoped that further careful collecting may soon be done in these islands, the fauna of which merits still greater attention than it has yet received.

Of the total of 210 specimens, 53 came from Gonave Island and 11 from Grande Cayemite Island, the number of species known from each of these islands being considerably enlarged. A tabular list of the entire collection is given. The numerals after each locality stand for the number of individuals taken at that place. The specimens are now in the Museum of Comparative Zoology at Cambridge, Massachusetts.

	<i>Haitian mainland.</i>	<i>Gonave Island.</i>	<i>Grande Cayemite Island.</i>
<i>Gonatodes notatus</i> .....	.....	Pte. à Raquette 1	
<i>Aristelliger</i> lar (juv.).....	.....	Pte. à Raquette 1	
<i>Sphaerodactylus cinereus</i> .....	{ Miragoane 3 Mt. Rochelle 6 Cape Haitien 1		
<i>Sphaerodactylus copei</i> .....	Miragoane 3		1
<i>Anolis chlorocyanus</i> .....	Hinche 2	Pte. à Raquette 2	
<i>Anolis coelestinus</i> .....	{ Cape Haitien 3 Miragoane 20		2
<i>Anolis distichus</i> .....	{ Cape Haitien 2 Miragoane 35 Hinche 5	Pte. à Raquette 13	1
<i>Anolis cybotes</i> .....	{ Cape Haitien 10 Miragoane 23 Hinche 3 Mt. Rochelle 4 Port de Paix 1		2
<i>Anolis doris</i> .....	.....	{ Pte. à Raquette 3 Anse à Galets 1	
<i>Anolis olssoni</i> .....	Cape Haitien 1		
<i>Anolis semilineatus</i> .....	Miragoane 1		
<i>Leiocephalus vinculum n. sp.</i> .....	.....	Pte. à Raquette 3	
<i>Leiocephalus schreibersii</i> .....	{ Port de Paix 1 Hinche 1		
<i>Leiocephalus semilineatus</i> .....	{ Hinche 1 Morne à Cabrite 1		
<i>Leiocephalus personatus</i> .....	Bellevue 2		
<i>Cyclura cornuta</i> .....	.....	Petit Gonave Id. 1	
<i>Celestus costatus</i> .....	.....	Anse à Galets 1	
<i>Sauresia sepsoides</i> .....	Morne Rochelois 1	Pte. à Raquette 1	
<i>Ameiva barbouri n. sp.</i> .....	.....	La Source 2	
<i>Ameiva taeniura</i> .....	Miragoane 5		2
<i>Ameiva chrysolaeama</i> .....	.....	Pte. à Raquette 18	
<i>Amphisbaena caudalis n. sp.</i> .....	.....		2
<i>Amphisbaena innocens</i> .....	.....	Petit Gonave Id. 1	
<i>Typhlops lumbricalis</i> .....	.....		1
<i>Tropidophis haetiana</i> .....	.....	Pte. à Raquette 1	
<i>Uromacer catesbyi</i> .....	{ Miragoane 2 Hinche 2		
<i>Uromacer dorsalis</i> .....	.....	La Grande Source 2	
<i>Uromacer frenatus</i> .....	Miragoane 1		
<i>Uromacer oxyrhynchus</i> .....	Miragoane 1		
<i>Leimadophis parvifrons</i> .....	{ (no label) 2 Cape Haitien 1		
<i>Leimadophis protenus</i> .....	.....	Gonave Island 2	
<i>Leimadophis alleni</i> .....	.....		
<i>Ialtris dorsalis</i> .....	Miragoane 1		
<i>Eleutherodactylus inoptatus</i> ....	Lake Miragoane 1		

### *Leiocephalus vinculum*, new species.

*Diagnosis*.—Parietal plates distinct, longitudinally divided, the outer not twice as large as the inner; a series of six band-like transverse supraoculars; nasal in contact with the rostral; ventral scales smooth; caudal crest higher than the dorsal crest; upper head-shields very weakly keeled; an enlarged scale on the temporal region above the ear; an elongate scale separating prefrontals from canthals. Allied to *Leiocephalus semilineatus* Dunn and to the *personatus* group through *Leiocephalus barahonensis* Schmidt.

*Type*.—Mus. Comp. Zool. No. 25435 (collector's no. 289, lot 54), adult male collected by Walter J. Eyerdam on August 5, 1927, at Pte. à Raquette, Gonave Island. “. . . curly-tailed lizards on rocks in forest near Saline Madre Siade.”

*Description of the type*.—Head-shields enlarged, the anterior ones very

weakly ridged, the supraorbitals and posterior ones a little more heavily ridged; three scales between the rostral and the first supraocular, the posterior very large; nasal in contact with rostral; internasals not unusually elongate, separated from each other; the frontals, prefrontals and internasals embracing a medial series of three contiguous scales, the central one slightly the largest, the anterior one in contact with the rostral; frontals and prefrontals separated from the canthals by an elongate scale; three supraciliaries; six supraoculars; occipital small, bordered by two distinct pairs of parietals on each side, the inner about two-thirds as large as the outer; four (on left side of head only three) upper labials and five lower labials to a point below the center of the eye; a conspicuously enlarged, heavily keeled scale on the temporal region just above and in front of the ear opening; anterior border of the ear with four large projecting scales. Dorsal scales large, imbricate but not mucronate except towards the tail, some of the dorsals near the median line being hexagonal in shape with the tips squarely cut off; laterals slightly smaller than dorsals; ventrals larger than dorsals, smooth, their posterior edges highly denticulate; about 46 scales around the middle of the body; about 57 scales from occiput to a point directly above the vent; about 14 dorsal scales to a head-length; nuchal scales quite small; those on the side of the neck like the dorsals; those behind the ear keeled and imbricate, not granular. Shoulder folds present, but no lateral folds. The adpressed hind leg reaches to about the center of the eye. Digits compressed; the fourth toe with 26 keeled lamellae. A low but distinct dorsal crest and a higher caudal crest; the other caudal scales mucronate. The keels of the lateral and dorsal scales are directed backwards and upwards, so that the longitudinal scale-rows converge strongly on the back. Tail highly compressed.

*Dimensions.*—Snout to vent, 65 mm.; head, 14 mm.; tail (tip reproduced), 87 mm.

*Color (in alcohol).*—Head brown; back iridescent bronze-green with indications of cross-bands on the nuchal region; traces of a dark-brown, much interrupted lateral stripe leaving the eye, continuing over the shoulder and onto the side of the tail where it persists only as a series of small brown spots widely separated; upper surfaces of arms and legs bronze. Chin and throat with alternating dark brown and light bronze stripes which are somewhat irregular and tend to anastomose. Remainder of under surface tan, with occasional bluish scales. Beneath the eye two light patches, set off by dark vertical marks.

*Variations.*—In the two paratypes, secured under the same conditions as the type specimen, not much variation is shown. The scales around the body seem to be 45 and 49 in number in these two paratypes, but as the longitudinal rows are exceedingly uneven, due to the convergence on the back, the count varies at practically every scale. The number of scales from the occiput to a point directly above the vent is 58 and 60, and the number of dorsal scales in a head-length is 14 and 15. While the medial series of scales on the snout is continuous in the type, it is discontinuous in one of the paratypes. The other paratype has an old injury on the snout in this region.

In coloration the same essential features are present in all three specimens. One of the paratypes is much more brightly colored than the type, however, and has some brilliant pale green scales edging the darker cross-bars over the neck, and likewise accenting the lower edge of the dark lateral stripe. Below this the sides appear purplish brown, with the occasional bright blue scales mingled there.

*Remarks.*—In possessing a greatly enlarged scale on the temporal region above the ear, as well as in the comparative smoothness of the anterior head-shields, the new species resembles *Leiocephalus semilineatus* Dunn. In having a strap-like scale separating the prefrontals from the canthals, the new species differs from *L. semilineatus*, but, on the other hand, this character links it with *L. barahonensis* Schmidt, which has smooth anterior head-scales, but no greatly enlarged temporal scale. The new species has more scale-rows around the body (45–49) than *L. barahonensis* (40); in this character, as well as in possessing the enlarged temporal scale it likewise differs from *L. beatanus* Noble which is allied to *L. barahonensis*.

***Ameiva barbouri*, new species.**

*Diagnosis.*—Ten rows of ventral plates; caudal scales oblique and very feebly keeled above, smooth on the sides and bottom of tail; nostril anterior to the nasal suture; three large supraoculars, the first not in contact with the loreal; no white lines or light spots anywhere on head, body, limbs or tail.

*Type.*—Mus. Comp. Zool. no. 25537 (collector's no. 288, lot 53), adult from La Source, Gonave Island, collected on August 7, 1927, by Walter J. Eyerdam.

*Description of the type.*—Profile of head flat on top, not curved except at the very end of the snout; nostril anterior to the nasal suture; rostral forming a right angle behind; anterior nasals broadly in contact behind the rostral; frontonasal longer than wide, in contact with the large loreal; prefrontals broadly in contact; frontal in contact with three supraoculars on each side; three large supraoculars, the anterior one not touching the loreal; behind the third supraocular three small scales occupying the position of a fourth supraocular; frontoparietals in close contact with the third supraocular; seven supraciliaries on the right and six on the left, the two anterior ones on each side in contact with the first supraocular, the remaining supraciliaries separated from the posterior supraocular by a row of granules; two fronto-parietals, followed by a transverse row of five subequal occipitals, these in turn being followed by about three rows of irregular post-occipitals; ear-opening large; five upper labials to a point directly beneath the center of the eye, the third and fourth the longest; six lower labials to the same point, the third the longest; the wedge of granular scales on the chin extending to the first pair of chin shields, which are partially in contact; chin and throat covered with granular scales, a distinct wide band of enlarged scales across the middle; mesopterygium covered with one or two irregular rows of enlarged scales, bordered by two or three successively smaller rows. Dorsal scales granular, uniform,

34 in the standard distance (from tip of snout to center of eye); laterals similar but smaller. Ventral plates in eight longitudinal series bounded by two very small external series, and in thirty-five transverse series; brachials and ante-brachials well separated; four wide strap-like scales across the fore-arm; post-brachials present as four pairs of somewhat enlarged scales at the elbow, only slightly larger than the granular scales on the back; femoral pores 16 and 18; anterior face of thigh covered with six or seven rows of flat scales; two tibial rows, the external row composed of four scales, of which the second and third are much larger than the others; no enlarged postanals; a pair of enlarged plates at the anterior border of the anus and two single median scales in front of them, the anterior the smaller; twenty-two scales in the fifteenth verticil of the tail. The hind leg being adpressed, the fourth toe reaches to the anterior edge of the tympanum. Hands and feet long and slender; the small "combs" very evident on the toes; fourth toe with thirty-seven lamellae beneath it; fifth toe longer than first. Tail exceedingly long, almost three times the length of the head and body together, and somewhat noticeably depressed in its proximal third; the scales obliquely set, very weakly keeled above, quite smooth on the side and bottom.

*Dimensions.*—Head and body, 84 mm.; tail, 230 mm.

*Coloration (in alcohol).*—Tail, ventral plates and under side of limbs brilliant cerulean blue; throat, chin, labials and point of snout rosy pink; dorsal surfaces uniform dull bluish-gray, without any light spots or lines whatever, but showing a bronze iridescence on shoulders and on base of tail; a dusky band beginning indistinctly on the canthus, passing over the ear and above the shoulder, broadening and becoming black on the side, narrowing above the insertion of the hind leg and fading out on the side of the tail; the outer two rows of ventral plates black anteriorly.

*Variation.*—The only additional specimen of this species was collected at the same time and place. It is somewhat mutilated, but shows precisely the same coloration as the type. The only essential differences are that the paratype has five lower labials to a point beneath the center of the eye, and that the first pair of chin-shields is divided transversely into two, the wedge of granular scales on the chin extending thus only to this second pair of chin-shields. On the paratype the post-brachial plates are a little more pronounced than in the type specimen. The head and body length is exactly the same as that of the type; the tail is defective.

*Relationships.*—While *Ameiva barbouri* is more clearly related to *A. taeniura* than to any of the other Hispaniolan *Ameivas*, they are not very close. The new species has a much longer snout, which becomes much narrower towards the tip when viewed from above; the brachials and ante-brachials are not continuous; the post-brachials are less well developed, and finally, the third supraocular is fully in contact with the frontoparietal. *Ameiva taeniura*, on the contrary, has a shorter and blunter snout; the brachials and ante-brachials are continuous; the post-brachials are relatively larger, while the third supraocular is partially cut off from the frontoparietal by granules. While the two species are alike in having an immaculate bluish-gray mid-dorsal region, the black lateral bands of

*A. taeniura* are sharply marked off by a narrow light line above and below, and the central portion of the black band contains numerous light spots.

In *A. barbouri* the black band merges gradually into the dorsal and lateral ground-color, and is itself without any spots or vermiculations whatever.

*Ameiva lineolata* is not the young *A. taeniura*, as Drs. Barbour and Noble have maintained,<sup>1</sup> but is a distinct and well marked species. Its characteristics, separating it from *A. taeniura* decisively, are these: The first supraocular is in contact with the loreal; the row of granules separating the posterior supraoculars from the frontoparietal does not extend as far forward as the third supraocular; the tail at the fifteenth verticil has fewer scales (17 to 18); there are two pairs of enlarged preanal plates in the first row, the inner pair the larger; there are 28 dorsal granules in the standard distance (from tip of snout to center of eye). In *Ameiva taeniura*, the first supraocular is separated entirely from the loreal by an intervening scale; the third supraocular is partly and sometimes completely separated from the frontoparietal by a row of granules; the tail at the fifteenth verticil has more scales (25 to 28); there is but one pair of enlarged preanal plates; the dorsal granules are smaller, there being about 42 in the standard distance, the minimum number being 36 in this species.

#### ***Amphisbaena caudalis*, new species.**

*Diagnosis.*—Nasals forming a suture on the snout; four preanal pores; two prefrontals, distinct from the nasals and labials; suture between the nasals nearly one-half as long as that between the prefrontals; ocular forming a suture with the second and third labials; no preocular; body rings 217; tail rings 20 to 21.

*Type.*—M. C. Z. no. 25550 (collector's no. 407, lot 63), an adult from Grande Cayemite Island, Haiti, collected by Walter J. Eyerdam from under stones in September, 1927.

*Description of the type.*—Rostral small, triangular, scarcely any of it visible from above; prefrontals long, the suture between them a little longer than that between the frontals and slightly over twice the length of the nasal suture; ocular moderate, quadrangular, smaller than the postocular and about equal to the third supralabial; a well developed temporal between the postocular and third supralabial, just touching the ocular and about equal to it in size; eye plainly visible through the ocular; two pairs of occipitals in contact behind the frontals, the anterior pair longer than broad, the posterior pair squarish; three supralabials, the second as long as the other two together; three lower labials, the second much longer than the other two together; behind the second lower labial a large malar shield; mental followed by a large median postmental somewhat longer than broad; just behind the postmental and between the second supralabials are two scales (post-genials) lying in a transverse row; 217 rings on the body and 21 on the tail; the segments of each ring longer than broad, excepting the two median ventral ones which are slightly broader than long and

<sup>1</sup>Bull. Mus. Comp. Zool. Cambridge, vol. 59, No. 6, Oct., 1915, p. 435.

between which the suture is less deep than elsewhere; 14 segments above the lateral line and 20 below it; six anal shields; four preanal pores.

*Color (in alcohol).*—Drab above, the center of each segment darker; lighter below anteriorly, turning to yellowish-white posteriorly.

*Dimensions.*—Head and body length, 137 mm.; tail, 12 mm.; greatest diameter of body, 5 mm.

*Variations.*—A single paratype, taken at the same time and place as the type, besides being somewhat larger, varies from it in the following slight characteristics: The temporal scale is relatively somewhat smaller than in the type specimen; there are 18 segments below the lateral line instead of 20; there are 20 tail-rings instead of 21. In all other respects it agrees with the type specimen.

The length of the head and body in the paratype is 170 mm.; tail, 17 mm.; the greatest body diameter about 6 mm.; the body is somewhat shrunken and stiffened.

*Remarks.*—From the true *Amphisbaena innocens*, its closest relative, it differs in having 20 to 21 tail rings instead of 13 to 16; in having the first and third supralabials proportionately smaller in relation to the second supralabial, and in having a somewhat shorter postmental.